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## 5.6 CULTURAL RESOURCES

In accordance with CEC regulations, this section evaluates the effects of the proposed project on cultural resources. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance. Numerous laws, regulations, and statutes, on both the federal and state levels, seek to protect and target the management of cultural resources. These include:

- Antiquities Act of 1906;
- Historic Sites Act of 1935;
- Reservoir Salvage Act of 1960;
- National Historic Preservation Act of 1966;
- National Environmental Policy Act of 1969;
- Executive Order 11593 (Projection and Enhancement of the Cultural Environment, 5/13/1971);
- 36 CFR 800 and CFR 60 (Advisory Council on Historic Preservation: Protection of Historic and Cultural Properties, Amendments to Existing Regulations, 1/30/1979, National Register of Historic Places, Nominations by States and Federal Agencies, Rules and Regulations, 1/9/1976);
- Revisions to 36 CFR 800 (Protection of Historic Properties, 1/10/1986);
- Archaeological and Historical Preservation Act of 1974;
- American Indian Religious Freedom Joint Resolution of 1978;
- Archaeological Resources Protection Act of 1979;
- California Environmental Quality Act of 1970;
- Native American Graves Protection and Reparation Act of 1990.

Collectively, these regulations and guidelines establish a comprehensive program for the identification, evaluation, and treatment of cultural resources.

The following sections document the efforts undertaken to determine whether cultural resources could be adversely affected by the implementation of the proposed project. Section 5.6.1 presents the environment that may be affected, Section 5.6.2 identifies the environmental consequences, and Section 5.6.3 discusses the cumulative effects associated with the proposed project. Section 5.6.4 indicates the mitigation measures to be implemented to avoid identified impacts. Subsequent sections present the regulatory context. Specifically, Section 5.6.5 identifies the LORS applicable to the proposed project; involved agencies and agency contacts; and permits and scheduling. The figure and tables are found at the end of the section.

### **5.6.1 Affected Environment**

The Salton Sea Unit 6 (SSU6) plant site is situated in central Imperial County, California, approximately 7.5 miles southwest of Niland and 6 miles northwest of Calipatria. The plant site, proposed pipeline and transmission line routes, well pads, and other project components extend for distances of 10 to 15 miles north, south, east, and west of the plant site itself. A record search conducted for the project focused on a 1-mile-wide study area surrounding each of these components. Additionally, the Area of Potential Effects (APE) for cultural resources was defined to include the footprint of the plant site and all project components. Specifically, the entire project area was subjected to a pedestrian archaeological survey, including the entire 160-acre plant site parcel and 200-foot corridors along all linear facilities, and all well pads. For the most part, all project facilities are within agricultural lands, while linear facilities, including roads, pipelines, and transmissions lines, follow a combination of paved or graded agricultural roads. One segment of a proposed L-Line Interconnection route crosses undeveloped desert lands. Although construction of facilities is not anticipated to result in adverse effects to built resources, a cursory assessment of structures immediately adjacent to construction corridors was undertaken. Structures identified along these corridors consist of modern agricultural facilities and extant geothermal energy facilities.

#### **5.6.1.1 Natural Setting**

##### **5.6.1.1.1 Physical Environment**

The SSU6 Project area is within the Colorado Desert (Salton Trough) environmental zone and is bordered on the west by the Peninsular Range, which runs the full length of Baja California and 135 miles into Alta California, and to the east by the Mojave Desert. The Colorado Desert consists of a depressed area 80 miles long and 30 miles wide, situated between two forks of the San Andreas Fault. Elevations in the trough range between 6 to 75 meters below sea level. Prehistorically, much of this area was under the waters of Lake Cahuilla. Several times in the past, the Colorado River filled the entire basin with fresh water to form the expansive lake which measured as much as 55 km wide and 98 m deep. These wet periods were followed by times when the Colorado River did not flow into the area, and the waters of Lake Cahuilla evaporated. Today, the only remnants of Lake Cahuilla are the playa surfaces, beach terraces, and the Salton Sea (Moratto 1984:18).

The Colorado Desert is defined by a Lower Sonoran life zone, which is characterized by low rainfall, hot summer temperatures, and low humidity. In the low valleys, summer temperatures average between 100°F to 118°F in the shade. Plants common to this zone include the goosefoot family (*Chenopodiaceae*), creosote bush (*Larrea divaricata*), mesquite (*Prosopis juliflora* var. *torreyana*), saltbush (*Atriplex* sp.), and cactus (*Cactaceae*). Animal life includes jackrabbit, bobcat, coyote, rodents, birds and reptiles (Moratto 1984:22-23, 342; Ornduff 1974:56).

##### **5.6.1.1.2 Geology**

The Salton Trough is the landward extension of the Gulf of California tectonic system and is one of the few regions existing today where continental crust is actively being rifted and then replaced by ocean crust. Near the project area are five 2,400- to 8,500-year-old rhyolite domes which comprise the Salton Buttes volcanic field. These volcanic domes are the vestiges of active magma emplacement. Rocks are primarily sedimentary and range from approximately two to

five million years old. These rocks are of a nonfossiliferous, nonmarine sequence that primarily consists of stream delta and lake deposits, as well as minor evaporants. These rocks were deposited during the repeated flooding of the Salton Slough by the Colorado River, and the subsequent desiccation of the large resultant lake. Obsidian Butte, northwest of the proposed plant site, provided a source of tool stone for the prehistoric inhabitants of the region.

### **5.6.1.2 Prehistory**

Limited research has been conducted in the Colorado Desert region, with the archaeological record divided tentatively into two temporal periods: the Western Pluvial Lakes Tradition, which is manifested in the San Dieguito Complex, and the Yuman Complex.

The earliest occupation of the southern California desert region is believed to have occurred between 7,000 to 12,000 years B.P. (radiocarbon years before the present) and is part of the Western Pluvial Lakes Tradition described by Bedwell (1970). Populations are currently considered highly mobile hunter-gatherers who often used large areas of the desert in search of sustenance.

Rogers (1939) was the first to describe the San Dieguito Complex of the southern California deserts based on surface surveys, and later on excavations of the Harris Site in San Diego County. The San Dieguito Complex includes three phases – San Dieguito I, II, and III – each marked by advances in tool technology. The San Dieguito I and II tool kits include bifacial and unifacial choppers, concave-edged scrapers, and scraper planes. San Diego II is distinguished from San Diego I by the presence of smaller bifacial projectile points, delicately made blades, and a larger diversity of choppers and scrapers. The San Dieguito III phase is represented by a greater variety of lithics, the use of precise pressure flaking. San Dieguito III tool assemblages contain pressure-flaked blades, scraper planes, leaf-shaped projectile points, plano-convex scrapers, elongated bifacial knives and crescents.

San Dieguito sites are commonly defined by lithic scatters, rock features, cleared circles and trails. These sites are often on terraces overlooking watersheds, or around the shores of extinct Pleistocene lakes, such as Lake Cahuilla. To date, reconstruction of past San Dieguito lifeways have been reconstructed with lithic materials because little organic materials have been recovered from these sites.

Little information exists for the Colorado Desert during the Archaic Period between the San Dieguito I and the Yuman II Complexes. Rogers (1945) suggests that there are no sites away from the Colorado River between these two periods. Later studies by Weide (1976) have reported a few isolated artifacts that date to this intermediate period, and suggest that there were sparse inhabitants in the region during this period. Isolates include a quartz point radiocarbon dated to 3030 +/- 100 B.C., the Truckhaven cairn burial with a date of 3840 +/-250 B.C., and a preceramic occupation along the old Lake Cahuilla shoreline dating to A.D. 370 (Moratto 1984:404). Several reasons for the lack of materials from the middle period have been given by Weide (1976) and Hayden (1976), including extreme climatic conditions, confusion with later habitations, and disturbance from the periodic inundation of Lake Cahuilla.

The Yuman Period, as discussed by Rogers (1945), marks the introduction of pottery into the Colorado Desert Region. Yuman I (A.D. 800-900 to 1050) corresponds to the time when Yuman peoples crossed the California deserts to occupy the Colorado River Valley below Black Canyon. The earliest known use of ceramic and agriculture in the region occurred during this phase, but

were limited to areas below Blythe, California. Local ceramics included Red and Red-on-Buff pottery, shouldered jars, the use of a red slip or wash, rim notching, polishing, incised decoration, and the use of the anvil and paddle style of manufacture (Moratto 1984:359).

The Yuman II period (A.D. 1050 – 1450) developed during the time when the Colorado River filled the Salton Trough to form Lake Cahuilla. During this time, the shouldered jar, rim-notching, and incised decorations were no longer used and the stucco finish on pottery, the recurved jar rims, and the tab handles on scoops were introduced. Also used for the first time was cremation of the dead; circular domed, brush-walled structures; Gulf Coast shell ornaments; and Pacific Coast shell beads and ornaments. In the Colorado Desert region, the Yuman II period ended with the evaporation of Lake Cahuilla, when much of the area was abandoned (Rogers 1945:192-194, in Moratto 1984:359).

The Yuman III period (A.D. 1450 to the nineteenth century) is represented by a more restricted occupation area, as much of the Colorado Desert was abandoned because of the lowering of Lake Cahuilla (Moratto 1984:359). This period is characterized by dispersed seasonal settlements, and numerous trail systems, and coincide with the expansion and reduction of Lake Cahuilla (Waters 1982). Brown ware ceramics, followed by Colorado buff ware is introduced into the region along with Desert side-notched and Cottonwood triangular projectile points.

### **5.6.1.3 Ethnographic Background**

#### **5.6.1.3.1 Ethnography**

The Salton Sea area lies within the ethnographic territory of the Ipai-Tipai, who inhabited the region from the San Luis Rey River in the north, to approximately Todos Santos Bay in the south (see Figure 5.6-1). The Pacific Ocean served as the western boundary, and extended east across modern San Diego and Imperial Valleys to the southern edge of the Salton Sea to Sand Hills. This large area encompassed several life zones, including the coastal belt, the transitional plateaus, the mountain belt, and the Colorado Desert.

The Ipai-Tipai were originally classified as the Northern and Southern Diegueno and the Kamia, who occupied the extreme southern end of California and the northern portions of Baja California. Today, the Ipai are considered the northern dialect of the Diegueno and are composed of the Northern (or Northwestern) and Coastal Diegueno and the northern portions of the Western and Mountain Diegueno. The Tipai were once considered a part of the Southern Diegueno and the Western Kamia (Kroeber 1925:709; Luomala 1978:592).

The Ipai-Tipai language is classified as Diegueno, which is apart of the Yuman language family of the Hokan stock. Different customs can be noted between the Ipai and the Tipai, but generally ethnographic information treats the two groups as one unit (Kroeber 1925:710; Luomala 1978:592).

Kroeber (1925:712) estimated that about 3,000 Ipai-Tipai existed before historic contact, but Luomala (1978:56) believes that efficient use of the different ecological niches could have supported a population double or triple Kroeber's estimate. Most Ipai-Tipai settlements were non-permanent campsites that a band would occupy during the year. Often groups would winter together at one campsite, and then disperse in the spring. A campsite was chosen for its location to water, natural protection from weather and ambush, and availability of natural resources.

Houses were burned following a death, and previous house sites were avoided because of the notion that the ghosts caused illness (Luomala 1978:597).

Structures varied depending on the locality, purpose, and the availability of raw materials. Summer dwellings were often minimal, consisting of only a windbreak. Caves were also used at this time, where available. Structures found within mountain oak groves were more substantial and often had platform supported granaries, while winter villages were located at lower elevations in sheltered areas. A typical shelter had a sunken floor, and was dome or gable shaped with a withe-tied pole framework with thatch, covered with grass and earth. The dome-shaped dwellings usually had two small arched entries at opposite ends that were placed to avoid the wind. The gables had a rectangular-shaped opening that faced east, which was a ritual direction. Attached to dwellings was a windbreak made for outdoor activities and cooking during the summer. Ipai-Tipai who lived near sloughs often built rectangular sand covered houses, the largest for the chief. Some Tipais who wintered in the mountains lived in caves or in bark-roofed, slab huts (Luomala 1978:597).

Seasonal travel took the Ipai-Tipai from lower elevations in the winter, to higher ecological zones in the summer following the ripening of vegetation. Plants were the major source of sustenance, and acorn was the staple resource for most Ipai-Tipai. Other important plants include agave, cactus fruits, wild grass seeds, wild plums, mesquite pods, watercress, miner's lettuce, yucca, and piñon nuts. Deer, rodents, and birds supplemented the diet. Although horticulture was minor compared to the gathering of wild foods, the Tipai's living in the Imperial Valley planted maize, beans, teparies, and melons on lands that had been flooded.

Clothing was generally not worn by men or children, while women commonly wore a one- or two-piece apron, often made from willow bark. Sandals were worn when the ground was rough or thorny, and were made of agave fiber, the sole made 0.5 inches or more thick. In cold weather, robes, which were also used as bedding, were made of rabbit skin, willow bark or buckskin (Kroeber 1925:721; Luomala 1978:599).

Trade took place between the Ipai's and Tipai's more frequently than it did with unrelated groups; however, major trails used by other tribes such as the Yuma passed through Ipai-Tipai territory. Items such as salt, dried seafood, and abalone shells from the coast were often traded for inland items such as acorns, agave, mesquite, and gourds (Cuero 1968:33 in Luomala 1978:601). Upland Tipai's often wintered with kin in the valleys where gardens provided sustenance during lean times. Upland Tipai's resources such as granite for pestles, steatite for arrow straighteners, and minerals for paint, were collected by the valley Tipai's (Luomala 1978:602).

#### **5.6.1.3.2 Ethnohistory**

Despite early contact with Europeans, the Ipai-Tipai traditional life went relatively unaltered until 1769, when attempts were made to colonize and convert them to Christianity. The Ipai's and Tipai's often violently resisted Franciscan and Dominican control, and uprisings were frequent. By 1779, however, the San Diego Mission had almost 1,500 Ipai-Tipai neophytes living nearby. With the establishment of the Santa Ysabel branch of the mission, Native Americans living inland could become neophytes without moving far from their traditional homes and, by 1821, about 450 Ipai-Tipai lived near Santa Ysabel (Luomala 1978:594).

When the missions became secularized by the Mexican government, Ipai's and Tipai's became servants, and were unwelcome on their ancestral lands, forcing them to become rebels or to flee into the mountains. In 1846, the United States gained control of Ipai-Tipai territory. As the California economy grew after the Civil War, and with the discovery of gold at Julian in 1870, white settlers took over Ipai-Tipai lands. In 1875, an executive order established the first Ipai-Tipai reservations, primarily in the marginal locations where villages already existed. By the 1890s, many Ipai-Tipai men and women worked on ranches, in mines, and in settlements. By 1968, the Ipai-Tipai had 12 reservations, some which were shared with other tribes (Luomala 1978:595).

#### 5.6.1.4 History

The settlement of Imperial Valley is intertwined with the rerouting of water from the Colorado River and the creation of the Salton Sea. These actions brought needed irrigation to the area and provided an agricultural domain in the 1900s that did not previously exist because of aridity and the harsh terrain.

The Spanish were the first Europeans to travel into the Colorado Desert region, with Melchor Diaz of Francisco Vasquez de Coronado's expedition (1540 A.D.) noted as being the first to cross the Colorado River and travel into modern day Imperial County (Norris and Jacques 1980:39). Over 200 years later, the Spanish established the first missions in Alta California, and soon after Spanish settlers began to use a route across the Colorado Desert. Although there had been minor Spanish contact in Imperial County during the mid-1500s, substantial exploration of the area was accomplished by Juan Bautista de Anza. Anza, a captain in the Spanish military, volunteered to find an overland route from the southwestern and Baja California missions to the coastal missions. This trip led him across what is now the Anza Borrego Desert in 1774, accompanied by two priests and 20 soldiers. The following year, Anza led 240 emigrants and soldiers, along with their livestock, into Northern California, where they became the first European settlers of San Francisco. This emigration established the beginnings of the Desert Trail across Imperial Valley. In 1781, the Spanish settlements along the Yuman Crossing of the Colorado River were destroyed by Quechan Indians, and the Spanish abandoned the route through the Colorado Desert (Bean and Rawls 1983:34-35; Rolle 1969:87). The trail was not used again until 1826, when engineer Lieutenant Alferez Romualdo Pacheco from Mexico established the Desert Trail as an official mail route. Lieutenant Pacheco and his soldiers established a fort, about 6 miles west of Imperial, which was later abandoned and fell into ruin. During the 1820s, several southern routes across the Colorado Desert were established by Mexican soldiers and American settlers. The trails were minimally used until the war between Mexico and the United States, when a wagon road into California was established south and west of the Salton Sea. This route eventually was used as an overland trail by gold rush emigrants into California (Trafzer 1980). The trail across the Imperial Valley opened by Anza, and followed by later generations of explorers, trappers and eventually by settlers from the east coast, is known by many names, including the Sonora Road, the Colorado Road, the Emigrant Trail, and the Butterfield Stage Route. The Butterfield Stage Route, used from 1858-1861, was most likely the first distinct path across the Imperial Valley (Hoover, Rensch, and Rensch 1990:108). In the 1880s, the Old Kane Spring Road between Julian and Kane Springs became a popular route between Imperial Valley and the western mountains (Schaefer et al. 1987).

In the mid-1800s, water became the source of inspiration for development of the Imperial Valley. Considered the father of Imperial Valley, Dr. O.M. Wozencraft initially came to California for the Gold Rush, but set out to explore the Colorado Desert and devoted his life to the concept of land reclamation. By 1859, Dr. Wozencraft was given all State rights in the Salton Sink should he be able to establish the water supply as he proposed (Hoover, Rensch, and Rensch 1990:108). Although he was given these rights, the United States Congress was embroiled in the Civil War and Reconstruction, and the project was put on hold. Dr. Wozencraft died in 1887, never fulfilling his dream, but his ideas would eventually be used a few years later.

In 1892, C.R. Rockwood, a civil engineer from Colorado, rediscovered the possibility of irrigating the Imperial Valley with water from the Colorado River. George Chaffey, who originally rejected Wozencraft's plans, had found success in Australia and in San Bernardino County, with irrigation systems and became the financier of the project. Two new investment groups, the California Development Company and the Imperial Land Company, would help finance the canal systems. Rockwood was named head of the California Development Company and Chaffey would plan and direct construction of the vast canal and ditch system with the Salton Sink receiving the drainage from the irrigation system.

In 1900, extensive work began on the canal system, which would run throughout the Imperial Valley and connect with the Alamo River channel. On May 14, 1901, water was diverted from the Colorado River to the canal for the first time. In June, water traversed the system, eventually reaching Calexico. In the fall of 1901, 1,500 acres were under cultivation in the Calexico area, initiating the Imperial Valley agricultural industry (Henderson 1968:17).

During the next two years, the California Development Company built more distribution systems and main canals to service the expanding needs of the Imperial Valley. The population began to increase, shifting from a few surveyors working on the canals to 12,000 people in the valley by 1905. This increase in population brought the need for electricity and transportation by which to bring goods in and out of the Imperial Valley. W.F. Holt built the Holton Power Company and in 1903, construction of a branch line of the Southern Pacific Railroad would solidify the growth of the valley.

Although the new irrigation systems had created a boom in production and population, the Imperial Valley people endured hardships associated with both deficient land surveys, which left communities without any property to secure loans, and negative government soil surveys damaging the credibility of the area. The events culminating in the creation of the Salton Sea, however, would wreak additional havoc on the Imperial Valley communities.

Heavy silt deposits in the new canals created blockages and water was unable to flow properly. As the silt began to accumulate in the canals, openings were dug to relieve the water flow. Unfortunately, these silt deposits and canal openings coincided with a series of floods in 1904-1905. These floods allowed the Colorado River to flow full force through the canals, resulting in the rapid erosion and widening of the temporary bypass openings. Although attempts were made by the Southern Pacific Company and the California Development Company to halt the water flow, the flooded channel was not closed until February 1907 ([www.imperial.cc.ca.us](http://www.imperial.cc.ca.us)).

Results of the flooding severely transformed the Imperial Valley. Thirteen thousand acres were lost from the flooding and ensuing erosion. The Salton Sink, virtually dry before the flooding, had filled to become a 50- by 15-mile body of water and developed into the largest inland sea in



North America. Crops, land, and railroad lines were annihilated by the flooding waters and forced many families out of the area temporarily ([www.imperial.cc.ca.us](http://www.imperial.cc.ca.us)).

The California Development Company could not financially withstand the impact of the flooding, and was dissolved in 1909. The years following were devoted to rebuilding and restructuring the land and water conveyance systems in Imperial Valley. In 1922, the Imperial Irrigation District was formed placing the existing 13 mutual water companies under a single controlling body. The bulk of the migration to the area by settlers from Illinois, Iowa, Kansas, Nebraska and Texas began in the 1910s. The land purchased by these farmers underwent extensive alterations and leveling to ensure an even flow of water to the crops. Although the canals provided water to the farms, the salinity of the soil created another problem for Imperial Valley farmers. The salt, which accumulated on the surface during evaporation, destroyed the roots and seedlings of plants. This problem was remedied in 1929 by construction of an extensive drainage system which laid out deep drains to each farm. This drainage system flushed the salt out of the fields as new water was brought in. Also supporting settlement of the region was the construction of the Hoover Dam which eliminated the possibility of another devastating flood, as well as the construction of the All American Canal. Completed in 1934, the All American Canal routed water through only United States soil and, by 1940, delivered water to many of the local farms.

Early agriculture in Imperial Valley was devoted to the production of alfalfa, dairying, and raising hogs. During this period towns were established in Imperial Valley including, Brawley (1908), Westmorland (1910), Niland (1913) and Calipatria (1914). By 1930-1940s, varied crops were cultivated such as cantaloupes, citrus, grapes, wheat, beets, asparagus, and cotton. Many farms evaluated in this report were constructed during this time. The design of the residences was vernacular in nature and built to endure the extreme heat in the summer. The large-screened front porches and sleeping rooms provided respite from the hot interior of the houses during the evening. Many of the farms were planted with trees, and specifically palm trees, to provide not only shade, but also as identification of ones residence on the flat landscape.

Many roads were named after prominent citizens either living on or near the roads. Lack Road was likely named for Eugene S. Lack and Fred Lack, both prominent businessmen in Brawley, engaged in the automobile business and later in real estate and insurance business as Lack & Hurley. Other references to Lack family in the area occur from 1917 until 1960. Hoover Road was named for Clyde O. Hoover immigrated to the area in 1916 and established a ranch in the 1930s. Mr. Hoover was also active in Farm Bureau work serving as the first vice-president of the California Farm Bureau. Other references to Hoover occur until 1951 (Henderson, 1968:211).

Today, there are 3,000 miles of irrigation and drainage canals serving 500,000 acres of cultivated land in Imperial Valley and its cities and towns, yielding nearly \$1 billion in crops ([www.imperial.cc.ca.us](http://www.imperial.cc.ca.us)). The advent of air conditioning, coupled with low utility rates, have drawn industry to the area. Geothermal power, aerospace, manufacturing and agriculture now dominate the landscape in Imperial Valley, proving that a vast desert area has become one of the world's most fruitful gardens (Hoover, Rensch, and Rensch 1990: 109).

#### **5.6.1.5 Native American Consultation**

To further assist in acquiring information regarding potential cultural resources in or near the project location, a request was submitted to the Native American Heritage Commission (NAHC;

Appendix H). The NAHC provided a list of contacts, all of whom were notified by letter regarding the project and questioned about their concerns and/or knowledge of resources in the area (Appendix H). These include representatives of the Ewiiapaayp Tribal Office, La Posta Band of Mission Indians, Manzanita Band of Mission Indians, Campo Band of Mission Indians, Kumeyaay Cultural Heritage Preservation Program, and Fort Yuma Indian Reservation-Quechan Tribe. No responses from these groups have been received to date.

#### **5.6.1.6 Key Personnel Qualifications**

URS cultural resources personnel who supervised and/or conducted the record search and field survey, and prepared the technical report and AFC for this section include:

- Michael S. Kelly, M.A., R.P.A. (URS Senior Archaeologist)
- Christopher Harper, M.A., R.P.A. (URS Archaeologist)
- Tracy Henderson, B.A., (URS Archaeologist)
- Margaret Trumbly, B.A., (URS Archaeologist)
- Brian Flynn, B.A., (URS Archaeologist)
- Erin Dwyer, B.A., (URS Archaeologist)
- Jessica Kusz, M.S. (URS Architectural Historian)
- Will Hoyle, B.A. (URS Cultural Resources Staff)
- Bradbury Brown, B.A. (Archaeologist)
- Keith Hamm, B.A. (Archaeologist)

Mr. Kelly and Mr. Harper meet the professional standards of the Secretary of the Interior for this work (Standards and Guidelines for Archaeology and Historic Preservation, National Park Service 1983) and are professionally certified by the Register of Professional Archaeologists. Inventory conducted on lands administered by the Bureau of Land Management (BLM) was undertaken under URS' Cultural Resource Use Permit No. CA-99-01-035.

#### **5.6.1.7 Prefield Research**

##### **5.6.1.7.1 Previous Research**

A records search and literature review was undertaken by URS Corporation staff and staff of the Office of Historic Preservation at the Southeast Information Center at the Imperial Valley College Desert Museum. Pertinent USGS 7.5-minute and 15-minute topographic quadrangle maps were examined for location and information data on known archaeological and historical resources within the project APE and within 1 mile. Other resources consulted include: the National Register of Historic Places (NRHP) and the California Register of Historic Sites, California Points of Historic Interest, and the California State Historical Landmarks.

Preparation for the historic resources field survey (built environment) consisted of an archival inventory and overview of all known historic resources within the study area. The archives at the Imperial Valley Historical Society and the San Diego Historical Society were also accessed to identify known historic resources in the survey area. This study provided the basis for evaluating project impacts and determining historic resources likely to be present in the project area.

As determined by the records search, previous archaeological investigations conducted near the project have identified numerous prehistoric and historic archaeological sites (see Tables 5.6-1 and 5.6-2). Specifically, seven archaeological sites have been previously documented within the SSU6 APE: CA-IMP-900, -901, -902, -4931, -3671, -5108, -7804, -7834. Two additional sites and one isolated find occur within the APE of the Alternate L-Line Interconnection (see Section 6.0-Alternatives): CA-IMP-6415, -6416, -6436-I (See Section 6.0-Alternatives). Seventy-five additional sites and 19 isolates occur within a 1-mile radius of the APE (Table 5.6-2). The following sections provide a description of past investigations and a summary of the previous research that demonstrate the historic and prehistoric sensitivity of the project area.

#### **5.6.1.7.2 Project Area**

Table 5.6-1 lists the previously recorded cultural resources within the SSU6 Project APE. These include six prehistoric sites and one prehistoric isolate. Site location maps and site records are provided in Confidential Appendix H. Three sites (CA-IMP-900, -902, and -903) consist of small segments of possible prehistoric trails along agricultural access roads south of the proposed plant site, within the corridor of the proposed L-Line Interconnection. Little information has been recorded on these resources. According to information on file at the Imperial Valley College Desert Museum, these trail segments were first noted in 1859 during surveys conducted by the United States Geological Survey (USGS). The trails are now in heavily disturbed and cultivated areas. Although surface visibility in these areas during inventory was excellent, no evidence of these trails was observed.

Three sites, CA-IMP-4931, -CA-IMP-5108 and CA-IMP-7804, are prehistoric properties situated within the corridor of the proposed L-Line Interconnection. CA-IMP-4931, recorded in 1982, was noted as an artifact scatter composed of lithics, ceramics, and flaked and ground stone tools. CA-IMP-5108 is a major north to south trail that runs along the eastern edge of section 9. The proposed transmission line corridor traverses perpendicular to the recorded orientation of the trail, which was not relocated during the recent survey. Site CA-IMP-7804 is a lithic and ceramic artifact scatter situated just west of the intersection of State Highway 86 and Bannister Road. This site contains flakes, cores, hammerstones, ground stone implements, and pottery sherds. The proposed route of the L-Line Interconnection traverses through the remains of the site, most of which has been heavily disturbed by road building, a large sand barrow pit as well as natural erosion. No cultural materials associated with this site were identified within the project corridor.

The historic site (CA-IMP-7834) consists of the Westside Main Canal, a large concrete-lined irrigation channel constructed in the 1930s. This canal parallels portions of the transmission line corridor along Highway 86, and crosses the L-Line Interconnection corridor at Bannister Road.

Two sites (CA-IMP-6415 and -6416) and one isolated flake (CA-IMP-6536-I) are along the Highway 86 alternative. No indications of these resources were identified within the project corridor.

#### **5.6.1.7.3 Project Vicinity**

In addition to the resources above, 75 previously recorded sites and 19 isolates occur within a 1-mile radius of the project APE (Table 5.6-2). These resources include 90 prehistoric sites and isolates, one multicomponent site, and two historical sites. The prehistoric sites consist of

habitation sites, an obsidian quarry, and lithic scatters, as well as isolated pottery and lithic fragments. The multicomponent site (CA-IMP-6487/H) is a ceramic and lithic scatter with historic metal, glass and ceramics. The historical sites consist of a trash dump (CA-IMP-6344H) with materials dating to the 1910s and 1920s, and a segment of a wagon trail (CA-IMP-3283H). These sites and isolates vary from 200 to 1200 meters in distance from the APE. No cultural materials related to these resources were identified within the APE during inventory.

#### **5.6.1.8 Field Studies**

Archaeological inventory of the APE was conducted from January 7-11, 2002, February 13-15, 2002, April 10-12, 2002, and May 27-31, 2002. Survey transects averaged 15 meters in spacing and were used to examine project facility areas and linear corridors, which measured 60 meters (200 feet) wide. Staff responsible for conducting fieldwork are listed above in Section 5.6.1.6. An evaluation of the structures and buildings in the project area was conducted on March 28, 2002 by Jessica Kusz, URS Architectural Historian. Table 5.6-3 summarizes newly recorded cultural resources. Additional information on these resources is presented in Appendix H.

##### **5.6.1.8.1 Plant Facility**

#### ***Topography, Soils, and Existing Conditions***

The plant site is within a 160-acre agricultural field, currently under cultivation. The area is level and has been graded, cultivated, and heavily disturbed. Levees, graded gravel access roads, and irrigation canals bound the parcel. Three existing geothermal power plants are within 1 to 1.5 miles south and southeast of the proposed plant site.

#### ***Previous Work***

The records search indicated that no previous archaeological studies have been conducted within the plant facility area. No previously recorded sites are on or adjacent to the subject lands. Two sites associated with Obsidian Butte, however, recorded as CA-IMP-452 and - 6638, are situated to the northwest, 0.5 miles or more outside the APE.

#### ***Survey Results***

The entire 160-acre parcel within which the proposed plant site would be sited was surveyed using systematic pedestrian transects. No archaeological sites were identified, and no structures are present within or adjacent to the parcel. Ground visibility during the initial survey was relatively poor, limited to about 50 percent, because of commercial crops. Consequently, the parcel was subjected to additional intensive survey on April 10-11, 2002 following harvesting of crops. Ground visibility at this time was excellent. No archaeological materials were observed.

**5.6.1.8.2 L-Line Interconnection*****Topography, Soils, and Existing Conditions***

Most of the proposed L-Line Interconnection transmission line follows paved and graded agricultural and existing power-facility access roads. Existing transmission lines are present in several areas, and except for portions of a short (2.8-mile) route on BLM-managed desert lands, all areas have been heavily impacted by grading, road construction, and farming.

***Previous Work***

The records search indicated that limited archaeological studies have been conducted near the proposed transmission line corridor south of Highway 86, as well as along the alternate corridor that parallels Highway 86. Consequently, numerous archaeological sites have been recorded within or adjacent to this proposed transmission line corridor. These include four apparent prehistoric trail segments (CA-IMP-900, -902, -903, -5108) and two prehistoric artifact and feature scatters (CA-IMP-4931, -7804).

***Survey Results***

The proposed transmission line corridor was surveyed using systematic pedestrian transects. Six previously recorded sites along the corridor were revisited. Additionally, three new archaeological sites, all on the BLM lands, were identified and are described below. A small number of modern agricultural structures and extant geothermal power facilities are present adjacent to the corridor. Additionally, four locations containing historic structures were identified, and are discussed below. Ground visibility was excellent, averaging 95 percent.

**Sites**

**CA-IMP-900.** This site, along Lack Road, was noted during an 1859 USGS survey as a short segment of an apparent prehistoric trail. Little information is included on the site record. No indication of a trail is found in this location, currently used as an agricultural field.

**CA-IMP-902.** This site, along Lack Road, was noted during an 1859 USGS survey as a short segment of an apparent prehistoric trail. Little information is included on the site record, and it is not known when the site was identified. No indication of a trail is found in this location, currently used as an agricultural field.

**CA-IMP-903.** This site, along Lack Road, was noted during an 1859 USGS survey as a short segment of an apparent prehistoric trail. Little information is included on the site record, and it is not known when the site was identified. No indication of a trail is found in this location, currently used as an agricultural field.

**CA-IMP-4931.** This site, south of Bannister Road, west of Highway 86, and across the Westside Main Canal, was recorded and collected by WESTEC Services, Inc. in 1982. At this time, it was noted that the site consisted of a lithic and ceramic scatter composed of potsherds, debitage, a projectile point, lithic tools, two manos, and fishbone. Currently, only three flakes were noted at the recorded location of the site.

**CA-IMP-5108.** This site, 0.75 miles west of the intersection of Garvey Road and Highway 86, was recorded in 1982 by Ray Wilcox of the Imperial Valley College Museum. The site was noted as a major north to south trail that runs along the eastern edge of section 9. At the time of recordation, several trail cairns made of sandstone were noted, with no associated artifacts. No indication of a trail is currently found at this location, which is heavily disturbed by road building, erosion, and other mechanical disturbances.

**CA-IMP-7804 or 8303.** This site, off Bannister Road, west of the Westside Main Canal was first recorded in 2000 by Philip de Barros of Professional Archaeological Services. At this time, 72 pieces of debitage, two cores, one core/hammerstone, thirty potsherds, and one mano fragment were noted. The site currently consists of a diffuse scatter of potsherds, debitage, groundstone tools (manos), and cores. The site may be a part of the CA-IMP-5108 complex, which is 50 meters to the west. No discrete features or burnt bone were noted. Most of the material is just north of a large well-developed arroyo. A borrow pit is south of the large arroyo, as well as two small tributaries of the large arroyo. The site has been disturbed by road construction, a large sand borrow pit, and natural erosion. No cultural materials associated with the site were observed within the proposed transmission line corridor.

**BB-1.** The site, north of Bannister road, west of Highway 86, across the Westside Main Canal consists of a small, diffuse scatter of debitage, which consists of 5 dark gray translucent obsidian primary flakes and 12 black metavolcanic flakes. These flakes may have been uncovered by road grading activity. The flakes are aligned north to south on the west side of a dirt road with the site measuring 25 meters wide (east- west) and 60 meters long (north-south). One obsidian edge-modified flake was identified. This site is in an alluvial wash area with no topsoil left. Site BB-2 is about 70 meters southwest across the wash and begins where the topsoil has not been deflated. These two sites may have been connected by is now split by the deflated topsoil in between.

**BB-2.** The site, north of Bannister Road, west of Highway 86, across the Westside Main Canal consists of a diffused light lithic scatter composed of nine metavolcanic CCS flakes, one vesicular basalt mano fragment, and one ochre stained granitic mano. A well-developed dry arroyo bisects the site from east to west. This site may have once been associated with BB-1, but an alluvial wash area between the two may have erased any connection.

**KH-1.** This site, north of Bannister Road, west of Highway 86, and across the Westside Main Canal consists of a diffused scatter of debitage, a hammerstone, and one granitic mano fragment with all of the debitage appearing to be primary flakes.

### **Structures**

**Structure 1: 5897 Lack Road (Lack and Dickerson.** This property contains one 1940s era residence, one 1980s trailer residence and various outbuildings such as dog kennel, relocated pump house, and a storage shed. Palm trees, oleander bushes, and eucalyptus trees define the property. Local farmers, the Burns family, have owned the property since 1952. This Minimal Traditional style residence is a low-pitched, gabled, single-story building with an enclosed shed addition on the south elevation and a carport on the north elevation. The stucco residence lacks decorative detailing, and is adjacent to the trailer residence. The trailer is a 1980s doublewide with little architectural details. The other outbuildings were difficult to view, however, they are most likely simple wood frame construction.

**Structure 2: 5905 Lack Road (Lack and Walker).** This property contains one late-1940s residence, one 1920 to 1930s cottage, and a large 1960s corrugated metal storage shed. The Ranch style residence is a single-story, moderately pitched, gabled roof building with multi-level eaves. The stucco residence has a small shed porch on the east elevation and lacks decorative detailing. The diminutive 1920-1930s era wood-sided cottage appears to possibly have been altered to two stories at some point. This side-gabled building is quite small, approximately 15 feet across and 10 feet wide. The building is in poor condition with missing wood clapboards and deteriorated roof shingles, windows, and railing.

**Structure 3: 6005 Lack Road (Lack and Foulds).** This property contains one late-1940s Ranch style residence, with one 1940s workers cottage, a corrugated metal shed, and other miscellaneous wood shed structures. The property is defined by large eucalyptus trees surrounding the perimeter. The single-story, low-pitched, gabled 1940s stucco residence has an enclosed porch and lacks decorative detailing. The workers cottage is a small single-story wood building with a side-gabled roof. Two single-story sheds match the cottage in design and materials. One large metal shed with corrugated metal roofing is present toward the rear of the property.

**Structure 4: Vail Ranch-Lack Road and Bowles Road.** This property was located on the USGS topographic map from 1952 labeled as ‘Vail Ranch’; however, the aerial information and the placement of buildings was completed by USGS in 1942. The property was, therefore, extant in 1942 according to the USGS aerial map. According to the Imperial Valley Historical Society, Vail Ranch was recently sold by the Griset family. The Peck family owned the ranch before the Griset family. The Peck family purchased the property from the Vail family, who were one of the largest landowners in the San Diego area. Near Vail Ranch is the Vail Canal, which most likely can be connected to the Vail family. The property is composed of many 1930s wood clapboard buildings, along with one 1940s concrete block outbuilding, and one late-1940s to 1950s large, gabled metal shed. Other miscellaneous items such as dilapidated farm machinery and an old gas pump are located throughout the ranch. A deteriorated concrete block wall surrounds a portion of the main entry to the ranch. A non-functioning well is also present on the site, in proximity to a deteriorated wood pump house. Overgrown foliage indicates the perimeter of the main ranch property including various palm trees, lemon trees, and cactus.

#### 5.6.1.8.3 IID Midway Interconnection

##### ***Topography, Soils, and Existing Conditions***

The proposed IID Midway Interconnection corridor lies largely within agricultural lands and follows paved and graded agricultural access roads. All areas along the corridor have been heavily impacted by grading, road construction, and farming. The Calipatria State Prison is also located along this corridor.

##### ***Previous Work***

The records search indicated that no previous archaeological studies have been conducted along the proposed transmission line corridor. No previously recorded sites are on or adjacent to the subject lands.

***Survey Results***

The proposed transmission line corridor was surveyed using systematic pedestrian transects. No archaeological sites were identified along this corridor, while two isolates, a historical culvert, and a prehistoric chert flake were found within the APE. Ground visibility was excellent, averaging 95 percent.

**Isolates**

**Isolate 1.** The isolate is on the corner of Hooper and Wiest Roads. This historic isolate consists of two concrete water conveyance culverts running east to west along either side of Hooper Road, crossing under Wiest Road. The original portions of the culverts are stamped with the date 1949, with new sections bearing the date 1982. Both culverts measure 23 feet wide, 10 feet deep, with the concrete measuring 1-foot thick. The culverts are in good condition and are surrounded by leveled agricultural fields. To the southeast of the features are grain storage bins and one small structure. Transmission lines run north to south along the western edge of the isolate. Disturbances include natural erosion and auto traffic. The culverts are part of the J Lateral Water Conveyance System that was constructed for irrigation purposes.

**Isolate 2.** This isolate is in the northwest corner of an agricultural field, 5 meters south of Sampson Road. The isolated artifact is a gray/clear primary chert flake with red inclusions and some cortex. Short sparse grasses cover portions of the ground, which has been disturbed by plowing and other agricultural activities.

**Structures**

Two locations of historic structures, as well as a small number of modern agricultural structures, extant geothermal power facilities, and the Calipatria Prison are present adjacent to the corridor.

**Structure 5: No Address Available (Hooper and Weist Roads).** The property at Hooper and Weist Roads contains six utilitarian farm structures that appear abandoned. The largest of the structures are five steel interconnected hay silos with a deteriorated corrugated gabled metal roof connecting the five silos. The corrugated metal roof is attached to the silos by metal trusses. Each silo has a concrete foundation, riveted walls, and large metal hinged door. The silos are severely rusted on the interior and also display rust on the exterior. These silos were most likely constructed in the 1940s or 1950s to store alfalfa. Next to the silos is one small clapboard building. Painted on the side of the wood building is “Vago Hay Broker Main Office” leading one to infer that this was the business office for the hay storage. This simple 1940s shack is severely deteriorated. The roof and windows are missing, which has led to the extensive deterioration. Many clapboards and interior sheathing are also absent.

**Structure 6: 1205 A & B Hooper Road.** The property at 1205 A & B Hooper Road consists of a simple 1940s modified Ranch residence, three hay silos (identical to silos at Weist and Hooper), and one 1950s concrete outbuilding. The board and batten 1.5-story house has a gable roof with flared eaves. In the center of the house is a small second-story gabled roof addition. A large front porch is on the east elevation and includes a decorative railing and posts in poor condition. The three steel hay silos are near the residence and are covered by a corrugated gabled metal roof. Each silo has a concrete foundation, riveted walls, and a large, metal-hinged door. These silos were most likely



constructed in the 1940s or 1950s to store alfalfa. The 1950s concrete outbuilding has a shed roof and lacks decorative detailing. A few trees and one palm mark the location of the property.

#### **5.6.1.8.4 Well Pads**

##### ***Topography, Soils, and Existing Conditions***

Proposed production and injection well pads, near the plant site, are found largely within agricultural fields. These areas are level, and have been graded, cultivated, and heavily disturbed. Levees, graded gravel access roads, and irrigation canals bound the pad sites and three existing geothermal power plants are within 1 to 1.5 miles south and southeast of the proposed pads. Production Well Pad OB3 is on Obsidian Butte, a source of obsidian tool stone during brief periods of prehistory. This butte has been used extensively as a gravel quarry, and retains little if any of its original form or integrity.

##### ***Previous Work***

The record search indicated that no previous archaeological studies have been conducted within the proposed well pad areas and no previously recorded sites are on or adjacent to the subject lands. Two sites associated with Obsidian Butte, however, recorded as CA-IMP-452 and -6638, are to the northwest 0.5 to 2 miles outside the APE.

##### ***Survey Results***

Proposed well pad sites were surveyed using systematic pedestrian transects. No archaeological sites were identified, and no structures are present within or adjacent to the parcels. Ground visibility was excellent, averaging 90 percent.

#### **5.6.1.8.5 Production and Injection Pipelines**

##### ***Topography, Soils, and Existing Conditions***

Proposed production and injection well pipelines, near the plant site and well pads, are located largely within agricultural fields. These areas are level, and have been graded, cultivated, and heavily disturbed. Levees, graded gravel access roads, and irrigation canals bound the pipeline corridors.

##### ***Previous Work***

The record search indicated that no previous archaeological studies have been conducted within the proposed pipeline corridors and no previously recorded sites are on or adjacent to the subject lands. Two sites associated with Obsidian Butte, however, recorded as CA-IMP-452 and -6638, are to the northwest 0.5 to 2 miles outside the APE.

***Survey Results***

Proposed pipeline corridors were surveyed using systematic pedestrian transects. No archaeological sites were identified, and no structures are present within or adjacent to the parcels. Ground visibility was excellent, averaging 90 percent.

**5.6.1.8.6 Water Supply Pipeline*****Topography, Soils, and Existing Conditions***

The water supply pipeline follows paved and graded agricultural and existing power-facility access roads and all areas have been heavily impacted by grading, road construction, and farming.

***Previous Work***

The record search indicated that no previous archaeological studies have been conducted along the water supply pipeline corridor. No previously recorded sites are on or adjacent to the subject lands.

***Survey Results***

The proposed pipeline corridor was surveyed using systematic pedestrian transects. No archaeological resources were identified. Ground visibility was excellent, averaging 95 percent.

**5.6.2 Environmental Consequences**

CEQA requires that the significant impacts to archaeological or historical resources be determined. Archaeological and historic resources are those that are listed in or determined eligible for listing in the California Register of Historical Resources (CRHR), or are included in a local register of historical resources. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource has integrity and meets the criteria for listing on the CRHR. Resources already listed or determined eligible for the National Register of Historic Places (NRHP) or the California Historic Landmarks 770 or higher, are also by definition eligible for the California Register. Historic resources included in historic resource inventories prepared according to California State Office of Historic Preservation guidelines (and thus included in the State Inventory of Historic Resources) or designated under county or city historic landmark ordinances may be eligible if the designation occurred during the previous five years.

Compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, as set forth in 36 CFR 800 will be required for the L-Line Interconnection route across BLM lands. California state and federal criteria for evaluating cultural resources, however, are generally consistent. Application of one set of cultural resources criteria, therefore, essentially conforms to the other. Consequently, resources found to be eligible or not eligible for nomination to the CRHR generally would be evaluated similarly for the NRHP. NRHP criteria are listed below in Section 5.6.5 and apply when a project has federal involvement.

For a resource to be eligible for the California Register, it must satisfy the following three standards:

1. A property must be significant at the local, state or national level, under one or more of the following criteria:
  - a. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.
  - b. It is associated with the lives of persons important to the nation or California's past.
  - c. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
  - d. It has yielded, or may be likely to yield, information important to the prehistory or history of the State or the Nation;
2. A resource must retain enough of its historic character or appearance to be recognizable as a historic property, and to convey the reasons for its significance; and
3. It must be fifty years old or older (except for rare cases of structures of exceptional significance).

The California Register regulations define “integrity” as “the authenticity of an historic resource’s physical identity, evidenced by the survival of characteristics that existed during the resource’s period of significance” (California Office of Historic Preservation, 1990:17). That is, it must retain enough of its historic character or appearance to be recognizable as a historical resource. California Register regulations specify that integrity is a quality that applies to historic resources in seven ways: location, design, setting, materials, workmanship, feeling, and association. A property must retain most of these qualities to possess integrity.

A project is considered to have a significant impact on the environment if it causes a substantial adverse change in the significance of a historical resource. Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired.

As noted above, impacts to identified cultural resources must be considered if the resource is an “important” or “unique archaeological resource” under the provisions of CEQA Sections 15064.5 and 15126.4 and the eligibility criteria, or if the resource is a “historic property” as defined in the NHPA and its implementing regulations. In many cases, determination of a resource’s eligibility can be made only through extensive research and archaeological testing. Because this may be costly and time-consuming, it is recommended that whenever possible, all resources be avoided to the maximum extent feasible.

### **5.6.2.1 Plant Facility**

#### **5.6.2.1.1 Construction-related Impacts**

No archaeological sites were identified within this area. Consequently, construction activities will not result in any impacts to known archaeological resources.

**5.6.2.1.2 Operation-related Impacts**

No archaeological sites were identified within this area. Consequently, project operation activities will not result in any impacts to known archaeological or historic resources.

**5.6.2.2 L-Line Interconnection****5.6.2.2.1 Construction-Related Impacts**

As described above, nine archaeological sites are present along the proposed transmission line corridors. These consist of the following resources:

**CA-IMP-900.** This site, along Lack Road, was noted during an 1859 USGS survey as a short segment of an apparent prehistoric trail. Little information is included on the site record. No indication of a trail is found in this location, currently found within an agricultural field.

**CA-IMP-902.** This site, along Lack Road, was noted during an 1859 USGS survey as a short segment of an apparent prehistoric trail. Little information is included on the site record, and it is not known when the site was identified. No indication of a trail is found in this location, currently found within an agricultural field.

**CA-IMP-903.** This site, along Lack Road, was noted during an 1859 USGS survey as a short segment of an apparent prehistoric trail. Little information is included on the site record, and it is not known when the site was identified. No indication of a trail is found in this location, currently found within an agricultural field.

**CA-IMP-4931.** This site, south of Bannister Road and west of Highway 86, was originally recorded as a sparse scatter of lithic and ceramic artifacts. All observed cultural materials were collected in 1982, destroying the integrity of the site. Currently, only three flakes were observed in the site location.

**CA-IMP-5108.** This site, 0.75 miles west of the intersection of Garvey Road and Highway 86, was recorded in 1982 by Ray Wilcox of the Imperial Valley College Museum. The site was noted as a major north to south trail that runs along the eastern edge of section 9. There were several trail cairns made of sandstone, with no associated artifacts. No indication of a trail is found at this location, which is heavily disturbed by road building, erosion, and other mechanical disturbances.

**CA-IMP-7804 or 8303.** This site, off Bannister Road, west of the Westside Main Canal was first recorded in 2000 by Philip de Barros of Professional Archaeological Services. At this time, 72 pieces of debitage, two cores, one core/hammerstone, thirty potsherds, and one mano fragment were noted. The site currently consists of a diffuse scatter of potsherds, debitage, groundstone tools (manos), and cores. The site may be apart of the CA-IMP-5108 complex, which is 50 meters to the west. No discrete features or burnt bone were noted. Most of the material is just north of a large well-developed arroyo. A borrow pit is south of the large arroyo, as well as two small tributaries of the large arroyo. The site has been disturbed by road building, a large sand borrow pit and natural erosion.

**BB-1.** This site consists of a small, sparse scatter of obsidian and metavolcanic flakes, possibly uncovered or disturbed by grading activities along a slightly improved dirt road.

**BB-2.** This site is a very light scatter of lithic materials and ground stone tools approximately 70 meters southwest of BB-1. A well-developed arroyo separates the two sites.

**KH-1.** This site is a very diffuse scatter of lithic debitage, as well as a hammerstone and ground stone tool fragment. The four trail sites (CA-IMP-900, 902, 903, and 5108) reflect little data potential beyond recordation, and exhibit little or no integrity. Because they have not been formally evaluated, however, they must be treated as important or significant resources and should be avoided. If avoidance is not feasible, testing and evaluation will be required. Given their condition and limited data potential, such evaluation would likely result in a recommendation of not eligible for listing in state or federal historic registers. The remaining five sites (CA-IMP-4931, -7804, BB-1, BB-2, and KH-1) have also not been formally evaluated, but exhibit varying degrees of integrity. Site CA-IMP-4931 was subject to nearly 100 percent surface collection, likely resulting in little or no remaining integrity. That portion of site CA-IMP-7804 previously recorded within the transmission line corridor has been severely impacted, and no cultural materials were observed within the corridor. This portion of the site, therefore, likely does not contain significant data potential. The three remaining sites (BB-1, BB-2, and KH-3) are all newly recorded resources and exhibit some integrity. Because these sites have not been evaluated, they must be treated as significant until determined otherwise. Consequently, it is recommended that these sites be avoided during all project-related activities. If they cannot be avoided, testing and evaluation of significance will be required. If determined significant during the evaluation process, appropriate mitigation of impacts will be necessary.

**Structure 1: 5897 Lack Road (Lack and Dickerson).** This property contains one 1940s residence, one 1980s trailer residence, and various outbuildings such as dog kennel, relocated pump house, and a storage shed. Palm trees, oleander bushes, and eucalyptus trees define the property. Local farmers, the Burns family, have owned the property since 1952.

This Minimal Traditional style residence is a low-pitched gabled single-story building with an enclosed shed addition on the south elevation and a carport on the north elevation. The stucco residence lacks decorative detailing and is adjacent to the trailer residence. The trailer is a 1980s doublewide with little architectural details. The other outbuildings were difficult to view; however, they are most likely simple wood frame construction.

None of the buildings at 5897 Lack Road appears to meet eligibility criteria for the NRHP or the CRHP and, therefore, are recommended as ineligible for nomination to either Register. This property does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), nor is it associated with the lives of persons significant in our past (Criterion B). The buildings do not embody the distinctive characteristics of a type, period, or method of construction (Criterion C). In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies (Criterion D); however, this building does not appear to be a principal source of important information in this regard. This property has also been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and does not appear to meet the significance criteria as outlined in those guidelines. The DPR 523 forms presented in Appendix H, provide a more detailed explanation of significance and the evaluation of criteria for this building.

**Structure 2: 5905 Lack Road (Lack and Walker).** This property contains one late-1940s residence, one 1920s to 1930s cottage, and a large 1960s corrugated metal storage shed. The Ranch style residence is a single-story, moderately pitched, gabled roof building with multi-level

eaves. The stucco residence has a small shed porch on the east elevation and lacks decorative detailing. The diminutive 1920-1930s era, wood-sided cottage appears to possibly have been altered to two stories at some point. This side-gabled building is quite small, approximately 15 feet across and 10 feet wide. The building is in poor condition with missing wood clapboards and deteriorated roof shingles, windows, and railing.

Although the 1920-1930s era cottage is one of the older structures on Lack Road, the building does not appear to retain sufficient integrity to warrant listing on the NRHP or the CRHP. Integrity has been lost because of deterioration of materials, lack of workmanship, and loss of feeling and setting of the cottage. The other buildings on the property also do not meet eligibility criteria for the NRHP or the CRHP and, therefore, are considered ineligible for nomination to either Register. This property does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), nor is it associated with the lives of persons significant in our past (Criterion B). The buildings do not embody the distinctive characteristics of a type, period, or method of construction (Criterion C). In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies (Criterion D); however, this building does not appear to be a principal source of important information in this regard. This property has also been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and does not appear to meet the significance criteria as outlined in those guidelines.

The DPR 523 forms presented in Appendix H provide a more detailed explanation of significance and the evaluation of criteria for each building.

**Structure 3: 6005 Lack Road (Lack and Foulds).** This property contains one late-1940s Ranch style residence, with one 1940s workers cottage, a corrugated metal shed, and other miscellaneous wood shed structures. The property is defined by large eucalyptus trees surrounding the perimeter. The single-story, low-pitched, gabled 1940s stucco residence has an enclosed porch and lacks decorative detailing. The workers cottage is a small, single-story wood building with a side-gabled roof. Two single-story sheds match the cottage in design and materials. One large metal shed with corrugated metal roofing is present toward the rear of the property.

The buildings do not appear to meet eligibility criteria for the NRHP or the CRHP and, therefore, are recommended as ineligible for nomination to either Register. This property does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), nor is it associated with the lives of persons significant in our past (Criterion B). The buildings do not embody the distinctive characteristics of a type, period, or method of construction (Criterion C). In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies (Criterion D); however, this building does not appear to be a principal source of important information in this regard. This property has also been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and does not appear to meet the significance criteria as outlined in those guidelines.

The DPR 523 forms presented in Appendix H provide a more detailed explanation of significance and the evaluation of criteria for each building.

**Structure 4: Vail Ranch-Lack Road and Bowles Road.** This property was located on the USGS topographic map from 1952 labeled as ‘Vail Ranch’; however, the aerial information and the

placement of buildings was completed by USGS in 1942. The property was, therefore, extant in 1942 according to the USGS aerial map. According to the Imperial Valley Historical Society, Vail Ranch was recently sold by the Griset family. The Peck family owned the ranch before the Griset family. The Peck family purchased the property from the Vail family, who were one of the largest landowners in the San Diego area. Near Vail Ranch is the Vail Canal, which most likely can be connected to the Vail family. The property is composed of many 1930s wood clapboard buildings, along with one 1940s concrete block outbuilding, and one late-1940s-1950s large, gabled metal shed. Other miscellaneous items such as dilapidated farm machinery and an old gas pump are located throughout the ranch. A deteriorated concrete block wall surrounds a portion of the main entry to the ranch. A non-functioning well is also present on the site, in proximity to a deteriorated wood pump house. Overgrown foliage indicates the perimeter of the main ranch property including various palm trees, lemon trees, and cactus. The property at Lack and Bowles Road does not appear eligible for nomination to the NRHP; however, it does appear potentially eligible for nomination to the CRHP under Criteria 2. The property is considered eligible as a local resource and, therefore, is considered for nomination to the CRHP, rather than the NRHP, under CRHP Criteria 2, association with lives of persons important to local history. The Vail family were significant residents and important in the development of Imperial Valley. The ranch is significant for its historical associations with the Vail family who were major landholders in the San Diego area as well as Imperial Valley. The property and the Vail family may also be significant for association with the construction of the Vail Canal. The canal system in Imperial Valley was vital to the subsistence of settlers and farmers in the area. The period of significance for Vail Ranch is 1930-1940s. Extensive research would be necessary to meet the requirements for the proposed inclusion to the California Register and the structures, though only in fair condition, do maintain their integrity. The structures at Vail Ranch continue to convey their significance and, therefore, maintain integrity through location, setting, feeling, and association with the Vail family and the early development of agriculture in Imperial Valley. The DPR 523 forms presented in Appendix H provide a more detailed explanation of significance and the evaluation.

Regarding potential, three of the four locations containing historic structures along the L-Line Interconnection impacts do not appear to contain structures eligible for nomination to state or federal registers; the fourth may contain structures eligible to the CRHP. It should be noted, however, that power lines currently run throughout this potentially eligible property, as well as on Bowles Road paralleling the property. The proposed transmission line would be located across the road, approximately 90 to 100 feet from the ranch. Potential indirect impacts were also evaluated. Because the proposed transmission line would be located 90 to 100 feet from the ranch, no direct impact would be present. Because the proposed transmission line would be keeping with the setting that includes other existing distribution lines and would present no change to the setting in any substantive way, the proposed transmission lines would present no indirect effect on the property.

Visual impacts of the project to surrounding areas were also evaluated based on the amount of contrast added to the existing landscape by the proposed transmission lines and viewer sensitivity. The proposed transmission lines pose no change in the character to the ranch property or change in use of the property given that there are existing power lines located on and near the Vail Ranch property. No adverse change to the significance of the historic resource has therefore been identified. Structures present at this location and the remaining three locations have not been formally evaluated and should be treated as significant until determined otherwise. Similar conditions exist at the other

sites, however, including the presence of numerous extant transmission lines. The proposed transmission line will be consistent with the setting of earlier lines and should have no direct impact on the properties. Consequently, the proposed transmission line will not change the settings in any substantive way and therefore, should have no indirect impact on the properties.

#### **5.6.2.2.2 Operation-Related Impacts**

Project operation and maintenance activities will not result in any impacts to known archaeological or historic resources provided that sites CA-IMP-5109 and -7804 are avoided during maintenance activities, unless data recovery occurred at these sites during construction. This could be accomplished by requiring maintenance activities that occur near these sites be limited to the same part of the ROW disturbed by the initial construction.

#### **5.6.2.3 IID Midway Connection**

##### **5.6.2.3.1 Construction-Related Impacts**

No archaeological sites were identified within this area. Consequently, construction activities will not result in any impacts to known archaeological resources.

**Structure 5: No Address Available (Hoover and Weist Roads).** The property at Hoover and Weist Roads contains six utilitarian farm structures, which appear abandoned. The largest of the structures are five steel interconnected hay silos with a deteriorated corrugated gabled metal roof connecting the five silos. The corrugated metal roof is attached to the silos by metal trusses. Each silo has a concrete foundation, riveted walls, and large metal-hinged door. The silos are severely rusted on the interior and also display rust on the exterior. These silos were most likely constructed in the 1940s or 1950s to store alfalfa. Next to the silos is one small clapboard building. Painted on the side of the wood building is “Vago Hay Broker Main Office,” leading one to infer that this was the business office for the hay storage. This simple 1940s shack is severely deteriorated. The roof and windows are missing, which has led to the extensive deterioration. Many clapboards and interior sheathing are also absent. Although these structures are related to alfalfa production in Imperial Valley, they do not appear to meet the criteria for the NRHP or the CRHP and, therefore, are recommended as ineligible for nomination to either Register. This property does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), nor is it associated with the lives of persons significant in our past (Criterion B). The buildings do not embody the distinctive characteristics of a type, period, or method of construction (Criterion C). In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies (Criterion D); however, this building does not appear to be a principal source of important information in this regard. This property has also been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and does not appear to meet the significance criteria as outlined in those guidelines. The property does not maintain integrity through loss of materials and association. The DPR 523 forms presented in Appendix H provide a more detailed explanation of significance and the evaluation of criteria for each building.

**Structure 6: 1205 A & B Hoover Road.** The property at 1205 A & B Hoover Road consists of a simple 1940s modified Ranch residence, three hay silos (identical to silos at Weist and Hoover), and



one 1950s concrete outbuilding. The board and batten 1.5-story house has a gable roof with flared eaves. In the center of the house is a small second-story gabled roof addition. A large front porch is on the east elevation and includes a decorative railing and posts in poor condition. The three steel hay silos are near the residence and are covered by a corrugated gabled metal roof. Each silo has a concrete foundation, riveted walls, and a large metal hinged door. These silos were most likely constructed in the 1940s or 1950s to store alfalfa. The 1950s concrete outbuilding has a shed roof and lacks decorative detailing. A few trees and one palm mark the location of the property. Although the buildings at 1205 A & B Hooper Road are linked to agriculture in the Imperial Valley, the buildings do not appear to meet the criteria of the NRHP or the CRHP and, therefore, are considered ineligible for nomination to either Register. This property does not appear to be associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), nor is it associated with the lives of persons significant in our past (Criterion B). The buildings do not embody the distinctive characteristics of a type, period, or method of construction (Criterion C). In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies (Criterion D); however, this building does not appear to be a principal source of important information in this regard. This property has also been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code and does not appear to meet the significance criteria as outlined in those guidelines. The DPR 523 forms presented in Appendix H provide a more detailed explanation of significance and the evaluation of criteria for each building.

#### **5.6.2.3.2 Operation-Related Impacts**

No archaeological sites were identified within this area. As a consequence, project operation activities will not result in any impacts to known archaeological resources. No operation-related impacts are anticipated to the historic structures present along the route.

#### **5.6.2.4 Well Pads**

##### **5.6.2.4.1 Construction and Operation-Related Impacts**

No archaeological sites or historic structures were identified within this area. As a consequence, construction or operation activities will not result in any impacts to known archaeological or historic resources.

#### **5.6.2.5 Production and Injection Pipelines**

##### **5.6.2.5.1 Construction and Operation-Related Impacts**

No archaeological sites or historic structures were identified within this area. As a consequence, construction activities will not result in any impacts to known archaeological or historic resources.

### **5.6.2.6 Water Supply Pipeline**

#### **5.6.2.6.1 Construction and Operation-Related Impacts**

No archaeological sites or historic structures were identified within this area. As a consequence, construction activities will not result in any impacts to known archaeological or historic resources.

### **5.6.3 Cumulative Impacts**

#### **5.6.3.1 Archaeological Resources**

Proposed project implementation would not result in effects to known significant cultural resources. Unevaluated resources, however, are present within the proposed project corridor. These resources should be avoided during project construction. Consequently, it is unlikely that the proposed project will have significant cumulative effects to cultural resources. As noted above, however, it is possible that these resources cannot be avoided, or that previously undiscovered archaeological resources will be exposed during construction activities. Cumulative effect to such inadvertently exposed resources would not occur with the implementation of the mitigation measures specified in Section 5.6.4.1.

#### **5.6.3.2 Historic Architecture Resources**

Proposed project implementation is not anticipated to affect any historic architecture resources. Consequently, there should be no significant cumulative effects to historic architecture resources.

### **5.6.4 Mitigation Measures**

CEQA requires that if project implementation results in significant impacts to important cultural resources, then alternative plans and/or mitigation measures must be considered.

#### **5.6.4.1 Archaeological Resources**

All significant cultural resources identified within the APE will be avoided by project activities. There is a possibility, however, that buried archaeological resources occur within the confines of the archeological APE. Unless properly identified, evaluated, and managed, construction of the proposed project could result in a significant impact to the resource(s). With appropriate consultation by a qualified archaeologist, this impact would be mitigated to a less-than-significant level.

- **Cult-1 Retain a Qualified Archaeologist** – Prior to the start of project-related vegetation clearance, earth-disturbing activities, or project site preparation, a qualified professional archaeologist will be retained as the cultural resources specialist (CRS) who will be responsible for implementation of mitigation measures CULT-2, CULT-3, and CULT-4.
- **Cult-2 Cultural Resources Monitoring and Mitigation Plan** – Prior to the start of project-related vegetation clearance, earth-disturbing activities, or project site preparation, the CRS shall prepare a Cultural Resources Monitoring and Mitigation Plan (CRMMP), identifying general and specific measures to minimize potential impacts to sensitive cultural resources.

- **Cult-3 Worker Training** – Prior to the start of earth-disturbing activities, the CRS shall prepare and implement an employee training program for the protection of cultural resources.

The CRS will provide cultural resources training to all project managers, construction supervisors, and workers. The designated trainer will provide the workers with a set of procedures for reporting any sensitive resources that may be discovered during project-related ground disturbance and the work curtailment procedures that the workers are to follow if previously unknown cultural resources are encountered during construction. Initial training will occur prior to the start of project-related vegetation clearance, earth disturbing activities, or project site preparation and continue throughout the project construction period as needed for all new employees.

Training at the project site may be discontinued after all foundations at the site are completed and the CRS has inspected the site and determined that no cultural resources will be impacted. Training shall continue for project personnel working near other project components that will disturb native soils.

- **Cult-4 Construction Monitoring** – The CRS or his or her delegated monitor shall be present at times the specialist deems appropriate to monitor construction-related ground disturbance, including grading, excavation, trenching, and/or augering in the locations specified in the CRMMP.

All resources encountered during the mitigation and monitoring phase of the SSU6 project, except for isolated artifacts and isolated features that appear to lack integrity or data potential, will be evaluated for significance using CRHR and CEQA criteria described above. If a resource is found to be significant, it will be subject to avoidance through alterations in project design when feasible. If avoidance is not possible through project design modifications, appropriate mitigation through data recovery will be conducted, in accordance with this document and the CEC. For the purposes of analysis, all cultural materials, except for isolated artifacts that appear to lack integrity or data potential, are treated as potentially significant until formally evaluated.

#### 5.6.4.2 Historic Architecture Resources

There should be no significant impacts to historic architecture resources within the APE. Consequently, no mitigation measures are required.

#### 5.6.5 Applicable Laws, Ordinances, Regulations, and Standards

The proposed project will be implemented in accordance with the applicable laws, ordinances, regulations, and standards identified below. These LORS are also listed in Table 5.6-4.

Because the Lead Agency for the project is the CEC, CEQA is the regulation of most consequence. CEQA requires that public or private projects financed or approved by the State of California must assess the effects of the undertaking upon cultural resources. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance.

In addition to CEQA, Section 7050.5 of the California Health and Safety Code would become applicable if human remains associated with the Native American occupation of the area were discovered. This regulation requires that a County Coroner examine any discovered human remains and contact the NAHC if the remains are determined to be both archaeological and Native American. In compliance with Public Resources Code Section 5097.98, The NAHC would then be responsible for identifying a most likely descendent (MLD) to inspect the remains and make recommendations for their treatment.

The project requires federal involvement (i.e., BLM ROW grant and/or Section 404 permit) and compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, would be necessary. Section 106 requires federal agencies to identify cultural resources that may be affected by any undertaking involving federal lands, funds, or permitting. Additionally, the significance of the resources that may be affected by that action must be addressed using established criteria (36 CFR 60.4) for the NRHP. The criteria for NRHP eligibility are listed in 36 CFR 60 as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and

- (a) That are associated with events that have made significant contributions to the broad pattern of our history; or
- (b) That are associated with the lives of persons significant in our past; or
- (c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) That have yielded, or may be likely to yield, information important in prehistory or history.

If a resource is determined to be eligible to the NRHP, Section 106 of the NHPA (80 Stat. 915; 16 U.S.C. 470) and its implementing regulations (36 CFR 800) require that effects of the proposed project to that resource be determined. If NRHP eligible resources are identified, that would be adversely affected by the implementation of the project, then prudent and feasible measures to avoid or reduce these adverse impacts must be taken. Additionally, the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) must be provided an opportunity to review and comment on these measures. The ACHP has adopted regulations (36 CFR 800) that implement this commenting authority.

The Applicant is committed to site avoidance where feasible, thus alleviating the need for data recovery programs. Specific mitigation measures have been outlined in Section 5.6.4.1. If testing is required, it is estimated the initial testing/evaluation program can be accomplished in four months. If avoidance of a site found to be significant is not possible, formal compliance with Section 106 of the NHPA and/or CEQA/CRHR could require an additional 6 to 12 months to complete formal determinations of eligibility and effect (for sites subject to federal review) and for formalizing mitigation agreements. Such actions will be completed to ensure compliance with cultural resources LORS prior to construction. If compliance with Section 106 of the NHPA is required, such compliance is the responsibility of the lead federal agency.

**5.6.5.1 Federal Authorities and Administering Agencies**

**National Historic Preservation Act of 1966 (NHPA), as amended; 16 USC §470 et. seq.; Section 106; 36 CFR 800.** The code includes provisions for protection of significant archaeological and historical resources. Procedures for dealing with previously unsuspected cultural resources discovered during construction are identified in 36 CFR 800 (for implementing §106 processes).

The administering agency for the above regulation is the State Historic Preservation Officer (SHPO) and the federal lead agency.

The SSU6 Project would comply with this requirement through coordination with BLM to comply with all federal requirements. Section 5.6, Cultural Resources, includes cultural resource information that would support compliance with the Section 106 requirements. The SSU6 Project expects that the USEPA and the COE would also rely on BLM's Section 106 compliance coordination.

**National Environmental Policy Act of 1968 (NEPA), as amended; 42 USC §4321-4327; 40 CFR §1502.25.** The Act requires analysis of potential environmental impacts to cultural resources.

The administering agency for NEPA is BLM.

The SSU6 Project would comply with NEPA requirements through coordination BLM. The SSU6 expects that the USEPA and the COE would rely on the federal lead agency's NEPA compliance coordination.

**Federal Antiquities Act of 1906; 16 USC 432, 433.** This Act serves as the basis for legislation regarding the preservation of cultural properties on federal lands, and provides for a permit process for scholarly use of properties, and misdemeanor-level penalties.

The administering agency for this regulation is BLM. The SSU6 Project would comply with this regulation through coordination with the BLM.

**Executive Order 11593.** This Executive Order directs federal agencies to inventory cultural properties under their jurisdiction, to nominate properties to the NRHP, and to use due caution until the inventory and nomination processes are completed.

The administering agency for this regulation is BLM. The SSU6 Project would comply with this regulation through coordination with BLM.

**Archeological and Historic Preservation Act of 1976; 16 USC 469.** This Act provides for the preservation of historical and archaeological data that might otherwise be lost as the result of a federal construction project or a federally licensed or assisted project.

The administering agency for this regulation is BLM. The SSU6 Project would comply with this regulation through coordination with BLM.

**Archaeological Resources Protection Act of 1979; 42 USC 470aa et seq.** This Act provides felony-level penalties for removal or damage to archaeological resources more than 100 years old.

The administering agency for this regulation is BLM. The SSU6 Project would comply with this regulation through coordination with BLM.

**American Indian Religious Freedom Act of 1979; 42 USC 1996.** It is the policy of the United States to protect and preserve the American Indians' (and other indigenous groups) right to express and exercise their traditional religions, including access to religious sites.

The administering agency for this regulation is BLM. The SSU6 Project would comply with this regulation through coordination with BLM.

**Native American Graves Protection and Repatriation Act of 1990; 25 USC 3001.** This Act establishes the rights of Indian tribes and Native Hawaiians to claim ownership of human remains and certain cultural items held or controlled by federal agencies.

The administering agency for this regulation is BLM.

The SSU6 Project would comply with this regulation through coordination with BLM.

**Federal Register 48 44736-44738 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, September 1983.** These guidelines are non-regulatory standards for the gathering and treatment of data related to cultural resources.

The administering agency for the above regulation is the Secretary of the Interior and BLM. The SSU6 would comply with this regulation through coordination with BLM.

**Title 43 USC , Section 1701 et seq. Federal Land Policy and Management Act.** Requires the Secretary of the Interior to retain and maintain public lands in a manner that will protect the quality of historical and archaeological values.

The Secretary of the Interior and BLM are the administering agencies. The SSU6 Project would comply with this regulation through coordination with BLM.

#### **5.6.5.2 State Authorities and Administering Agencies**

**California Environmental Quality Act (CEQA) Section 15064.5, 15064.7, 15126.4, Appendix G Issue V.** CEQA addresses the treatment of cultural, historical, and archaeological resources that could be affected by the project, the evaluation of the importance of these resources, the assessment of project impacts to important resources, and the development of a plan to avoid or address adverse effects to these resources.

The administering agency for the above regulation is the CEC. The SSU6 Project would comply with this regulation through coordination with the CEC and implementation of the SSU6 Project CRMMP.

**California Public Resources Codes § 5020.1, 5024.1.** These codes give definitions of historic resources, establish a California Register of Historic Places, and set forth criteria nomination procedures.

The administering agency for the above regulation is the State Historical Resources Commission. The SSU6 Project would comply with this regulation through coordination with the Historical Resources Commission.

**California Public Resources Code §5097.5.** The code section makes it a misdemeanor to remove without authorization archaeological resources or paleontological remains on sites located on public lands (Stats. 1965, c. 1136, p. 2792).

The administering agency for the above regulation is the Imperial County Planning Department. The SSU6 Project would comply with this regulation through coordination with the County planning Department.

**California Public Resources Codes § 5097.98, 5097.99, 5097.991.** These codes define procedures for notification of discovery of Native American artifacts or remains, prohibit obtaining or possessing or obtaining Native American artifacts or remains, sets penalties for such actions, and sets forth that such artifacts should be repatriated. They also provide for mediation of disputes related to recovery and treatment of Native American human remains and identification of Most Likely Descendants.

The CRMMP for the SSU6 Project would also include provisions for coordination with the NAHC.

**California Public Resources Codes § 21083.2 and 21084.1.** These codes identify the responsibilities of the state lead agency (CEC), with regards to historical, cultural, and archaeological resources, including significance criteria, require mitigation measures.

The administering agency for the above regulation is the CEC. The SSU6 Project would comply with this regulation through coordination with the CEC and implementation of the CRMMP.

**California Public Resources Code §§25523(A), 25527; 20 CCR §§1752, 1752.5, 2300 - 2309, and Chapter 2, Subchapter 5, Article 1, Appendix B, Part (i).** The code sections provide for the inclusion of requirements in the CEC's decision on an AFC to assure protection of environmental quality; the AFC is required to include a detailed description and discussion of the environment of the project area and the CEC is required to give special consideration to the need for protection of unique historical, archaeological and cultural sites.

The administering agency for the above regulation is the CEC. The SSU6 Project would comply with this regulation through coordination with the CEC.

**California State Health and Safety Code §7050.5.** The code section provides for County Coroner identification of human remains and, if determined to be of Native American origin, coordination with the NAHC.

The administering agency for the above regulation is the Imperial County Coroner.

The CRMMP would address compliance with this requirement. A final CRMMP would be filed with the CEC prior to the start of construction.

### **5.6.5.3 Local Authorities and Administering Agencies**

**Imperial County General Plan.** The Imperial County General Plan Land Use Element Goal 9: Identify and preserve significant natural, cultural, and community character resources and the County's air and water quality.

Objective 9.1: Preserve as open space those lands containing watersheds, aquifer recharge areas, floodplains, important natural resources, sensitive vegetation, wildlife habitats, historic and prehistoric sites, or lands which are subject to seismic hazards and establish compatible minimum lot sizes.

The administering agency for the above regulation is the Imperial County Planning Department. The SSU6 Project would comply with this regulation through coordination with the County Planning Department.

#### 5.6.5.4 Involved Agencies and Agency Contacts

Unless consultation with SHPO becomes necessary, the NAHC is the only agency involved with the management of cultural resources for this project. Appendix H contains the correspondence with the NAHC concerning this project.

Additionally, the Imperial County Planning Department will review and comment on this AFC. Specific contact information for this agency is also listed below in Table 5.6-5, should the need for consultation arise.

#### 5.6.5.5 Permits Required and Permit Schedule

Other than certification from the CEC, no state, federal, or local permits are required by the project for the management of cultural resources. As described previously, consultation with SHPO and ACHP would be required under Section 106 if significant cultural resources were to be affected by the project.

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**Table 5.6-1**  
**PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN THE PROJECT APE**

Trinomial	Primary Number	Component	Resource Type	Cultural Remains	Reference	Project Component	Distance	
Imp-900		Prehistoric	Trail	Trail segment	Unknown	L-Line Interconnection	Adjacent to Lack Road	No evidence of site relocated
Imp-902		Prehistoric	Trail	Trail segment	Unknown	L-Line Interconnection	Adjacent to Lack Road	No evidence of site relocated
Imp-903		Prehistoric	Trail	Trail segment	Unknown	L-Line Interconnection	Adjacent to Lack Road	No evidence of site relocated
Imp-4931		Prehistoric	Lithe and Ceramic Scatter	Lithics, ceramics, flaked and ground stone	Westec 1982	L-Line Interconnection	Transmission line crosses	Three flakes noted
Imp-5108		Prehistoric	Trail	Trail segment and cairns	Westec 1982	L-Line Interconnection	Transmission line crosses trail (perpendicular)	No indication of site found
Imp-6415		Prehistoric	Lithic Scatter	Obsidian flakes, one projectile point, possible hearth	Wilcox 1982	Alternate L-Line Interconnection	200 ft north of Highway 86	No indication of site found
Imp-6416		Prehistoric	Lithic Scatter	Cores, choppers, flakes	Manley et al 1990	Alternate L-Line Interconnection	200 ft north of Highway 86	No indication of site found
Imp-6436-I		Prehistoric	Isolate	Metavolcanic flake	Whitehouse et al 1990	Alternate L-Line Interconnection	75 ft north of Highway 86	No indication of site found
Imp-7804	P-13-008303	Prehistoric	Lithic and Ceramic Scatter	72 pieces of debitage, 2 cores, 1 hammerstone, 30 pottery sherds, one mano fragment	De Barros 2000	L-Line Interconnection	Proposed transmission line traverses site	No cultural materials noted within corridor
Imp-7834	P-13-008334	Historic	Canal	Westside Main Canal, constructed between 1933-1938	Harris 2000	Alternate L-Line Interconnection; L-Line Interconnection	Canal parallels north side of Highway 86; Transmission line crosses canal at Bannister Road	

**Table 5.6 - 2   Previously Recorded Sites and Isolates  
Within One Mile of Project Area**

This data is confidential and is not appropriate for public distribution. Copies have been provided to the California Energy Commission under separate cover.

**Table 5.6-3  
NEWLY RECORDED CULTURAL RESOURCES WITHIN THE PROJECT APE**

Field Designation	Primary Number	Component	Resource Type	Cultural Remains	Reference	Project Component	Distance
S-1		Historic	Structures	1940-1980s era buildings; 5897 Lack Road	URS 2002	L-Line Interconnection	Adjacent to Lack Road
S-2		Historic	Structures	1920-1960s era buildings; 5906 Lack Road	URS 2002	L-Line Interconnection	Adjacent to Lack Road
S-3		Historic	Structures	1940s era buildings; 6005 Lack Road	URS 2002	L-Line Interconnection	Adjacent to Lack Road
S-4		Historic	Structures	1930-1950s buildings; Vail Ranch	URS 2002	L-Line Interconnection	Adjacent to Lack Road
S-5		Historic	Structures	1940-1950s buildings; Hooper and Weist Roads	URS 2002	IID Midway Interconnection	Adjacent to Hooper Road
S-6		Historic	Structures	1940s ranch buildings; 1205 A&B Hooper Road	URS 2002	IID Midway Interconnection	Adjacent to Hooper Road
SSI-01		Prehistoric	Isolate	1 potsherd	URS 2002	L-Line Interconnection	
SSI-02		Prehistoric	Isolate	4 potsherds	URS 2002	L-Line Interconnection	
SSI-03		Prehistoric	Isolate	1 Chert Flake	URS 2002	IID Midway Interconnection	15 ft south of Sampson Road
SSI-04		Historic	Culvert	1949 Culverts	URS 2002	IID Midway Interconnection	On Hooper Road
BB-1		Prehistoric	Lithe Scatter	17 obsidian and metavolcanic flakes	URS 2002	L-Line Interconnection	Proposed transmission line traverses site
BB-2		Prehistoric	Lithic and Ground Stone Scatter	Nine flakes and two ground stone tools	URS 2002	L-Line Interconnection	Proposed transmission line traverses site
KH-1		Prehistoric	Lithic and Ground Stone Scatter	Several flakes and one ground stone tool	URS 2002	L-Line Interconnection	Proposed transmission line traverses site

**Table 5.6-4  
SUMMARY OF LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

Jurisdiction	LORS	Requirements	Compliance Section	Administering Agency	Agency Contact
<b>5.6 Cultural Resources</b>					
<b>Federal</b>					
	NHPA; 16 USC §470; Section 106; 36 CFR 800	Provisions for protection of significant archaeological and historical resources.	Section 5.6.5.1	BLM, SHPO	1, 2
	NEPA; 42 USC 4321 - 4327; 40 CFR § 1502.25	Analysis of potential environmental impacts to cultural resources.	Section 5.6.5.1	BLM	1
	Federal Antiquities Act of 1906; 16 USC 432, 433	Basic legislation for preservation of cultural properties on Federal lands.	Section 5.6.5.1	BLM	1
	Executive Order 11593	Directs federal agencies to inventory, nominate properties to the NRHP and protect cultural resources	Section 5.6.5.1	BLM	1
	Archaeological and Historic Preservation Act of 1976; 16 USC 469	Provides for preservation of historical and archaeological data that might otherwise be lost as the result of a federally licensed construction project.	Section 5.6.5.1	BLM	1
	Archaeological Resources Protection Act of 1979; 42 USC 470aa et. seq.	Provides felony-level penalties for damage or removal of cultural resources on Federal lands.	Section 5.6.5.1	BLM	1
	American Indian Religious Freedom Act of 1979; 42 USC 1996	Establishes US Government policy to protect and preserve traditional religious beliefs and practices.	Section 5.6.5.1	BLM	1
	Native American Graves Protection and Repatriation Act of 1990; 25 USC 3001	Establishes right of Indian tribes to claim ownership of human remains and certain cultural items.	Section 5.6.5.1	BLM	1
	Federal Register 48 44-7739-447738 Secretary of the Interior's Standards and Guidelines, September 1983	Establishes standards and methods for the gathering, treatment, and protection of cultural, historical, and archaeological resources.	Section 5.6.5.1	Secretary of the Interior and BLM	1
	Title 43 USC , Section 1701 et seq. Federal Land Policy and Management Act.	Establishes standards for the protection of historical and archaeological resources on public lands.	Section 5.6.5.1	Secretary of the Interior and BLM	1
<b>State</b>					
	California Environmental Quality Act (CEQA) Section 15064.5, 15064.7, 15126.4, Appendix G Issue V.	Formal findings by the project lead agency regarding project-related effects to important archaeological, historical and cultural resources.	Section 5.6.5.2	CEC	3
	Cal. Pub. Res. Code § 5020.1, 5024.1	Establishes a California Register of Historic Places, sets forth criteria, definitions and nomination procedures.	Section 5.6.5.2	State Historical Resources Commission	5

**Table 5.6-4 (continued)**  
**SUMMARY OF LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

Jurisdiction	LORS	Requirements	Compliance Section	Administering Agency	Agency Contact
	Cal. Pub. Res. Code § 5097.5	This code section makes it a misdemeanor to remove without authorization archaeological or paleontological remains on sites located on public lands	Section 5.6.5.2	CEC	3
	Cal. Pub. Res. Codes § 5097.98, 5097.99, 5097.991	These codes establish procedures for dealing with Native American Artifacts.	Section 5.6.5.2	Native American heritage Commission (NAHC)	4
	Cal. Pub. Res. Codes § 21083.2 and 21084.1	Sets forth lead agency responsibilities related to historical, cultural, and archaeological resources.	Section 5.6.5.2	CEC	3
	Cal. Pub. Res. Code §§ 25523(A), 25527; 20 CCR §§ 1752, 1752.5, 2300 - 2309, and Chapter 2, Subchapter 5, Article 1, Appendix B, Part (i)	Special consideration of unique historical, archaeological and cultural sites.	Section 5.6.5.2	CEC	3
	Cal. Health & Safety Code § 7050.5	Determination of origin of human remains and coordination with NAHC.	Section 5.6.5.2	County Coroner (Medical Examiner)	6
<b>Local</b>					
	Imperial County General Plan Goal 9 Objective 9.1	Identify/preserve significant cultural resources, and preserve prehistoric and historic areas as open space	Section 5.6.5.3	Imperial County Planning Department	7



**Table 5.6-5  
CULTURAL AGENCY CONTACT LIST FOR  
LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

<b>FEDERAL</b>				
1	Bureau of Land Management El Centro Field Office 1661 Fourth Street El Centro, CA Greg Thompson, Field Manager (760) 337-4400	2	California Office of Historic Preservation 1416 9th Street, Room 1442 Sacramento, CA 95814 Dr. Knox Mellon, SHPO (916) 653-6624	
<b>STATE</b>				
3	California Energy Commission Mr. Paul C. Richins Energy Facilities Licensing Manager 1516 9th Street, MS 15 Sacramento, CA 95814 (916) 654-4074 (916) 654-3882 prichins@energy.state.ca.us	4	California Native American Heritage Commission Mr. Rob Wood 915 Capitol Mall, Room 364 Sacramento, CA 95814 916.653.4082	5 California State Historical Resources Commission Office of Historic Preservation 1416 9th Street, Room 1442 Sacramento, CA 95814 Dr. Knox Mellon, Executive Secretary (916) 653-6624
<b>LOCAL</b>				
6	Imperial County Coroner Harold Carter, Sheriff/Coroner 328 Applestill Rd. El Centro, CA 92243 (760) 339-6311	7	Imperial County Planning Department 939 Main St. El Centro, CA Jurg Heuberger 760.482.4236	